

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) A method for generating a superset pinout for a family of devices, comprising the steps of:

(A) defining a pinlist for each device within said family of devices, wherein said family of devices comprises devices having either (i) different numbers of high-speed transceiver channels, (ii) different functions of high-speed transceiver channels or (iii) different numbers and functions of high-speed transceiver channels;

(B) generating a superset listing of pins from said pinlist for each device within said family of devices;

(C) creating said superset pinout for said family of devices from said superset listing of pins to eliminate potential footprint variations within said family of devices; and

(D) marking each pin of said superset pinout associated with each member of said family of devices.

2. (CURRENTLY AMENDED) The method according to claim 1, wherein step (D) further comprises:

customizing a superset grid representing said superset pinout according to said superset listing of pins.

3. (CURRENTLY AMENDED) The method according to claim 2, wherein ~~step (D) further~~ said customizing comprises:

marking a specific pin in said superset grid for each member of said family of devices ~~in response to the customizing.~~

4. (ORIGINAL) The method according to claim 1, wherein said family of devices comprises devices with combined programmable logic and high-speed serial channels.

5. (CANCELED)

6. (PREVIOUSLY PRESENTED) The method according to claim 1, wherein step (C) further comprises:

eliminating potential layout variations within said family of devices with said superset pinout.

7. (PREVIOUSLY PRESENTED) The method according to claim 1, wherein step (B) further comprises:

combining pins shared by more than one member of said family of devices.

8. (ORIGINAL) The method according to claim 1, wherein step (C) further comprises:

allocating a pin for each signal in said pinlist.

9. (CURRENTLY AMENDED) The method according to claim 1, wherein step (C) further comprises:

providing a common footprint ~~to~~ for each member of said family of devices.

10. (CURRENTLY AMENDED) The method according to claim 1, wherein step (C) further comprises:

designing a board layout (i) to accommodate more than one member of said family of devices and (ii) to allow for ~~late changes~~
5 a change from one member of said family of devices to another member of said family of devices without affecting said board layout and without external components.

11. (PREVIOUSLY PRESENTED) The method according to claim 1, wherein step (C) further comprises:

limiting each pin of said superset pinout to a single function.

12. (CANCELED)

13. (CURRENTLY AMENDED) The method according to claim 1, wherein step (D) further comprises:

marking one or more pins of said superset pinout no-connect for a particular member device.

14. (ORIGINAL) The method according to claim 1, wherein said family of devices comprise programmable logic and high-speed serial channel devices.

15. (CURRENTLY AMENDED) The method according to claim ~~14~~, wherein ~~step (C)~~ said family of devices further comprises: ~~allowing for migration of devices within said family of devices with one or more sets of transceiver channels capable of operating~~
5 at 2.5 Gbps.

16. (CURRENTLY AMENDED) The method according to claim ~~14~~, wherein ~~step (C)~~ said family of devices further comprises: ~~allowing for migration to one or more devices having higher gate densities than other members of said family of devices.~~

17. (CURRENTLY AMENDED) The method according to claim ~~14~~, wherein ~~step (C)~~ said family of devices further comprises: ~~allowing for migration to one or more devices having increased bandwidth channels.~~

18. (CURRENTLY AMENDED) The method according to claim 1, wherein ~~step (C)~~ said different functions of high-speed transceiver channels further comprises Infiniband compliant functions and SONET compliant functions:

5 ~~reducing layout and footprint changes on a board configured to connect to said members of said family of devices.~~

19. (CURRENTLY AMENDED) An apparatus for generating a superset pinout for a family of devices comprising:

means for defining a pinlist for each device within said family of devices, wherein said family of devices comprises devices having either (i) different numbers of high-speed transceiver channels, (ii) different functions of high-speed transceiver channels or (iii) different numbers and functions of high-speed transceiver channels;

means for generating a superset listing of pins from said pinlist for each device within said family of devices;

means for creating said superset pinout for said family of devices from said superset listing of pins, wherein said superset pinout eliminates layout ~~variations~~ changes when migrating between devices within said family of devices; and

means for marking each pin of said superset pinout associated with each member of said family of devices.

20. (CURRENTLY AMENDED) ~~An apparatus comprising: a~~ A device configured to generate a superset pinout for a family of devices, wherein ~~(A)~~ said device is further configured to:

~~(i)~~ define a pinlist for each device within said family of devices₇;

~~(ii)~~ generate a superset listing of pins from said pinlist₇ for each device within said family of devices;

~~(iii)~~ create said superset pinout for said family of devices from said superset listing of pins₇; and

~~(iv)~~ mark each pin of said superset pinout associated with each member of said family of devices, ~~and (B)~~ wherein said

family of devices comprises two or more devices having either (i)
different numbers of high-speed transceiver channels, (ii)
different functions of high-speed transceiver channels or (iii)

15 different numbers and functions of high-speed transceiver channels
and said superset pinout is configured to reduce layout and
footprint changes on a board configured to connect to each member
of said family of devices.